Safe Session User Manual (CSD)

1. Introduction.

SafeSession application is developed to provide protection functions for voice data in the communication system of GSM standard with the usage of Nokia smartphones powered by Symbian OS 9.1-9.3.

For using the application you need only to install and start it. You don't need any special skills, key certification centers, additional softwares or devices, any administrative means for using it. Also there is no need in prior key and certification distribution for making a secure call (the main principal of Zimmermann system operation). SafeSession application provides confidentiality of phone conversations and protect data from wire-tapping and interceptions.

Pay attention: for having a safe conversation both subscribers need to have the application installed and launched on their phones .

2. Requirements.

1. Nokia smartphone with Symbian OS of 9.1, 9.2 or 9.3 version.
2. Internet access from the phone is desirable for receiving the license file.
3. Cell phone plan with service CSD activated (Data Call).

Some mobile operators assign separate number for activating this service.

3. Installation.

3.1. Installation using Nokia PC Suite.

1. Connect your phone to computer using Nokia PC Suite.
2. Click twice on SafeSession.sisx.
3. Follow the instructions on the monitor.

3.2. Installation via Bluetooth without Nokia PC Suite.

1. Send SafeSession.sisx to your phone via Bluetooth.
2. Installation file will appear on the phone screen in SMS form.
3. Open the message to start the installation.

SafeSession application will appear in the Installations folder.

4. Start.

Start the application. Then you can see the message "Collecting noise" (it appears only once when you start the application for the first time). Say some words for the software to collect the noise and in 10 seconds you will see the main menu of the application.

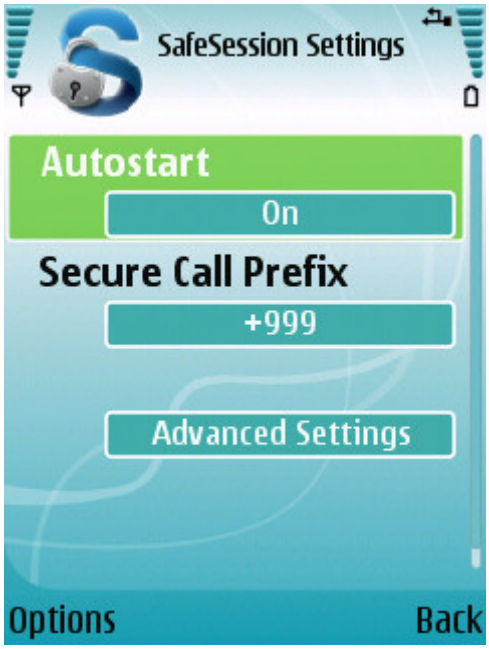
5. Application main menu.

Application main view contains the following items:

1. **Dial Secure Number** - allows choosing the contact you want to connect safely with.
2. **Settings** - allows you to change settings of the application.
3. **Licensing** - here you can find current state of the license, replace and remove it.
4. **About** - information about the application.

To hide the application and remain it background running, choose Hide or press No Key (often the key with red handset image). To close the application, choose Options - Exit SafeSession.

6. Settings.

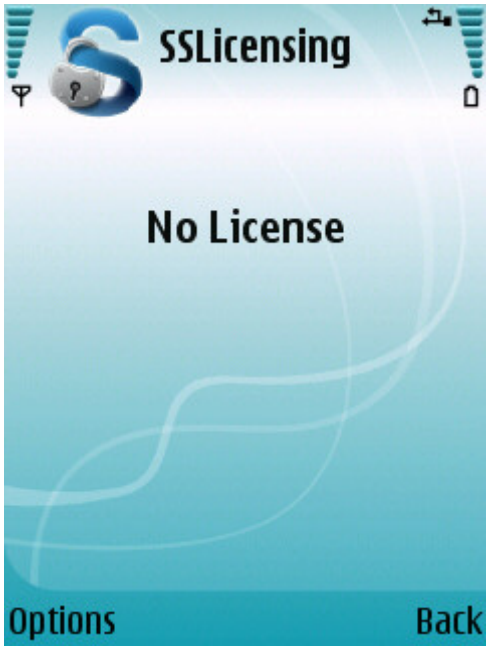


1. **Autostart** - allows selecting or unselecting automatic start of the application with each phone switching on.
2. **Secure Call Prefix** - here you can set the prefix for dialing safe numbers (see below).
3. **Advanced settings** - some additional settings.
    a. **Logging Detail Level** - allows to set the logging on/off (it is off by default).
    b. **Log File Path** - the folder where log files are saved.
    c. **Jitter buffer size** - shows the maximal size of jitter buffer in milliseconds.
    d. **Data Call Speed** - here you can see usable CSD mode.

⚠ Change of the parameters set by default can lead to deterioration of the connection quality or even to its total loss.

7. Licensing.

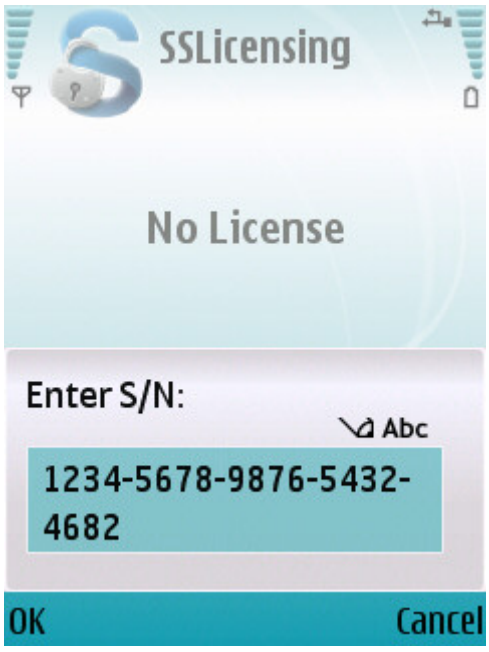
Here you can find information about the status of your current license.
To make or receive secure call, buy license on our site.



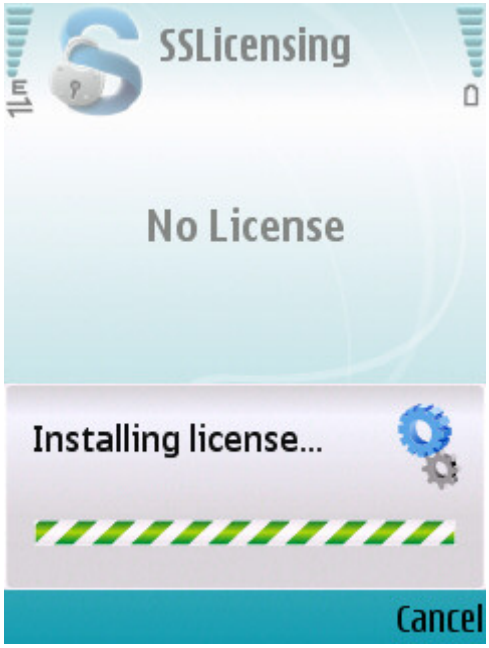
By using the menu Options you can:

1. **Buy license** - you can buy it on our site just from your phone (a browser will open).
2. **Get license by S/N** - download the license using your license number.
3. **Uninstall license** - you can uninstall current license and receive the refund (see Refund chapter).
4. **Show UID** - it allows seeing a unique identifier of the application copy (that can be required by Support Service).

To activate the license choose **Get license by S/N** menu item and enter your license code:



Choose O'K, then Internet access point, and wait a bit...



And in a few seconds the license will be activated.

8. Using SafeSession application.

8.1. Dialing with SafeSession application launched.

You can make a secure call in two ways:

1. Start the application, choose "**Dial Secure Number**" in its menu, and select the contact.
2. Start the SafeSession application, dial **[prefix][phone number]**.*
   Prefix of the number is +999 by default and can be changed in the menu "Settings", for example, +999 001 20 25 550.

> ⚠ We recommend not to change the prefix +999 of the number that is set by default.
> The prefix change can lead to the situation when the call will be switched to the international line in case if at the moment of the call dialing the application turned out not to be launched. Naturally, the payment for such call will be absolutely different.

To make SafeSession application work in the background choose Hide in the main view of the application or press No Key.

To quit the application choose Option in the main view of the application, then press Exit SafeSession.

8.2. Safe call reception.

To receive encrypted calls SafeSession application must be launched. We recommend you to activate autorun of the application. For this just choose Settings in the menu and put Autostart parameter in "on" position. Now the application will launch with every phone switching on.

With incoming call you will hear standard call signal and see the inscription "You have incoming secure call from (sibscriber name)". You can receive or decline it.

8.3 Call window

With every outgoing call and with receiving an incoming one Call Window appears on the screen. Here you can see a subscriber's number, his/her contact information (if it can be found in the phone book) and progress bar. The progress bar is a graphic picture with caption and depicts installation process of secure connection that can take up to 10 seconds.
When the secure connection is successfully installed, you will see the inscription "Call is secure" and the image of lock.
When installing first secure connection with certain subscriber the software will ask you to identify SAS (short message on the screen that must be identical for both subscribers in case if there was no outside interference). If they identify then answer the software's question in the affirmative and you keep talking, your voice is reliably encrypted. With the next connection with the same subscriber the software won't require the confirmation of SAS equivalence. However you will have an opportunity to compare your SAS that is displayed on the screen with the one that your interlocutor has received.

For the call to be over, choose "Hang up".

If the messages don't identify or you aren't sure about the voice identity of the subscriber, then your conversation is likely to be wire-tapped. Answer the software's question in the negative by choosing "Not EQ". The error message about the installation failure will appear. After this you can finish the call. With the next connecting session with the same subscriber the software will ask to identify SAS again.

8.4. Call settings.

In the Advanced Settings Chapter you can regulate sound quality:

- **Jitter Buffer Size** - if you decrease this parameter transmission delay of voice messages decreases accordingly, but sound quality becomes worse, and vice versa.
- **Data Call Speed** - this parameter is not supported by all mobile operators. If you increase it the sound quality can be better.